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## Strategic orientations in a competitive context: The role of strategic orientation differentiation

Rohit Deshpandé · Amir Grinstein · Elie Ofek

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**Abstract** Strategic orientation studies often provide ‘best practice prescriptions’ for firms in a given context—matching orientations to environmental conditions. While this perspective has value, empirical results are equivocal and an important reality has been overlooked: the fact that a firm’s decision to emphasize a particular strategic orientation can depend on its competitors’ orientation choices. Based on two studies of customer, technology and production orientations, we show that the emphasis a firm places on a strategic orientation depends on how competitive its environment is. When competition becomes less intense, firms place emphasis on the strategic orientation that matches the dominant environmental condition (e.g., technology orientation when technology turbulence is high). However, as competition intensifies, firms tend to follow strategic orientation differentiation: de-emphasizing the strategic orientation their main rival is emphasizing. Finally, we show that the greater the competitive intensity, the greater the contribution strategic orientation differentiation has on business performance.

**Keywords** Strategic orientation · Competition · Strategic differentiation

The area of strategic orientations is one of the most heavily studied in marketing over the past two decades. Strategic orientation reflects the strategic behaviors

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R. Deshpandé · E. Ofek  
Harvard Business School, Soldiers Field, Boston, MA 02163, USA

R. Deshpandé  
e-mail: [rdeshpande@hbs.edu](mailto:rdeshpande@hbs.edu)

E. Ofek  
e-mail: [eofek@hbs.edu](mailto:eofek@hbs.edu)

A. Grinstein (✉)  
Guilford Glazer School of Business and Management, Ben-Gurion University of the Negev,  
Beer Sheva 84105, Israel  
e-mail: [gramir@bgu.ac.il](mailto:gramir@bgu.ac.il)

implemented by a firm to create the proper actions for continuous superior performance (Hult and Ketchen 2001; Slater et al. 2007). While early research efforts focused almost exclusively on linking market orientation to business performance (e.g., Jaworski and Kohli 1993; Narver and Slater 1990), recent research discusses other viable strategic orientations such as production and technology (e.g., Gao et al. 2007; Noble et al. 2002). The recognition that a number of viable orientations exist has led researchers to further explore the contingencies under which firms are likely to adopt each orientation (Gao et al. 2007). This line of research has assumed that every firm will likely do better if it emphasizes a certain orientation in a particular environment, suggesting that there is a ‘best practice prescription’ or an ‘industry standard’ for all firms in a given situation. While this contingency perspective has value, empirical results are not clear as far as the match between different strategic orientations and specific environmental conditions (Gao et al. 2007; Gatignon and Xuereb 1997; Kirca et al. 2005).

We believe that a key theoretical and empirical gap in the extant literature is that it has ignored the reality that a firm’s decision to pursue a particular strategic orientation can depend on the nature of its competitors’ orientations. Indeed, accounting for competitors’ strategic behaviors is critical for success (Boeker 1991). The fact that previous research has overlooked the role of competitors’ strategic orientation choices in affecting a firm’s orientation selection suggests that previous ‘prescriptions’ as to the orientation a firm should follow in different conditions may not work well. A key reason is that if all firms in a market follow the same ‘prescribed’ strategic orientation, the relative advantage stemming from the adoption of such orientation is likely to diminish for all competing firms (for example, due to firms competing for similar resources and customers). If the context is such that firms tend to behave very aggressively to each others’ moves, we would expect some firms to strategically differentiate themselves by de-emphasizing the orientation their rivals are pursuing.

In this research, we add a new and relevant dimension to research on strategic orientation—exploring the role of “strategic orientation differentiation.” High levels on this construct reflect a firm’s tendency to establish a strategic orientation that is differentiated from its rivals’ and is often different from the industry standard. By contrast, lower levels on this construct reflect a firm’s tendency to emphasize a strategic orientation that is similar to that of its rivals’ and that often corresponds to the industry standard. This may have a significant impact on firms’ strategic behavior and performance. We suggest that for firms facing less competitive intensity, the dominant environmental conditions that have been studied before (i.e., technology turbulence, market turbulence and market growth) are likely to determine firms’ strategic orientation (e.g., technology orientation when technology turbulence is high). However, the emphasis on a particular strategic orientation in a more competitive context will also be driven by rivals’ orientations and may lead to strategic orientation differentiation. For example, when a rival emphasizes a technology orientation because the environment exhibits technology turbulence, the focal firm will have a tendency to de-emphasize technology orientation if the industry is highly competitive, typically putting more emphasis on an alternative orientation.

We contribute to the marketing literature in a number of ways. First, we introduce the notion of strategic orientation differentiation, studying how a firm's perception of its rivals' strategic orientations affects its strategic choices. The study of strategic orientation differentiation enables us to provide a second contribution, that is, to establish under which circumstances, environmental and competitive, the various strategic orientations perform better. Our results and the underlying explanation may be important in shedding light on the inconsistent empirical findings in the literature. Finally, our research design provides an important contribution. Prior research has no control over the reality that firms often balance among different orientations and that a strategic orientation is always relative to the other orientations the firm can embrace (e.g., Noble et al. 2002). In comparison, we simultaneously study multiple strategic orientations, accounting for the benefits firms gain from the 'relative emphasis' they place on each of them as well as for their interdependencies where greater adoption of one orientation is likely to be at the "expense" of others. Specifically, we study the central orientations that are discussed in the marketing literatures (Kotler 2003; Slater et al. 2007): customer, technology and production orientations. Deshpandé et al. (1993) define market/customer orientation as the "set of beliefs that puts the customer first" (p. 27). We follow the view that *customer orientation* is the core element of market orientation (Deshpandé and Farley 1998) and concentrate on it. A *technology orientation* suggests that commercial success relies on products and services that are technologically superior. Accordingly, firms devote their resources to R&D, acquire new technologies and technology capabilities, and develop innovative products (Gatignon and Xuereb 1997; Song et al. 2005). A *production orientation* is based on the belief that capabilities relating to production efficiencies, cost minimizations and mass distribution can be used effectively to produce widely available and inexpensive products (Fritz 1996; Noble et al. 2002).

## 1 Hypotheses development

### 1.1 Lower competitive intensity and strategic orientation differentiation

Competitive intensity is characterized by the breadth and aggressiveness of competitive actions (Slater and Narver 1994). In less competitive contexts, competitors are not powerful, they do not aggressively attack their rivals and they are slow to respond (Smith et al. 1991). This encourages tacit joint-maximizing monopolistic behavior and greater similarity among rivals' behaviors (Boeker 1991; Narver and Slater 1990). Thus, in less competitive contexts, the value of a particular strategic orientation may depend on dominant environmental conditions, and firms are likely to exhibit low strategic orientation differentiation. This suggests that the contingent perspective proposed by previous research with respect to the adoption of strategic orientations is likely to be valid for less competitive contexts.

Customer orientation is often associated with market/customer-related changes such as market growth (Gatignon and Xuereb 1997). When demand is growing, it is easier to acquire and retain customers and earn profits. At the same time, market information is important because customers are typically developing their preferences

during growth stages. Thus, customer orientation is necessary to understand and capture newly created markets (Gatignon and Xuereb 1997; Slater and Narver 1994). This leads us to suggest that in less competitive contexts, customer orientation is more likely to be adopted under conditions of market growth.

Technology orientation is often related to developing skills and processes that allow reacting to changes in technology and is, therefore, extremely relevant in technologically turbulent environments (Fritz 1996). The rationale is that in such environments, which are characterized by short cycles of innovation, technology orientation should enable firms to better take advantage of the environmental condition (Stanley et al. 2007; Song et al. 2005). This leads us to suggest that in less competitive contexts, technology orientation is more likely to be adopted under conditions of technology turbulence.

Production orientation is often related to situations where the ability to meet demand at scale and at low prices emerges, making this orientation especially relevant in slow growth and mature markets (Noble et al. 2002). The rationale is that in such markets the need to pursue efficiency and operational excellence while constantly reducing costs is vital to firm survival (Gatignon and Xuereb 1997; Olson et al. 2005). This leads us to suggest that in less competitive contexts, production orientation is more likely to be adopted under conditions of slow market growth.

In accordance with the above, we next present our first set of hypotheses. Although based on the arguments of prior research, the novelty here is our contention that these arguments are only relevant for less competitive contexts:

**H1** *The lower the competitive intensity, the lower the strategic orientation differentiation firms are likely to exhibit, placing greater emphasis on (a) customer orientation in growing markets, (b) technology orientation in technology turbulent markets and (c) production orientation in slow growth markets.*

## 1.2 Greater competitive intensity and strategic orientation differentiation

In more competitive contexts, adopting a strategic orientation emphasis that corresponds with the dominant environmental condition may not lead to superior performance if rivals are pursuing the same strategic orientation emphasis. Indeed, the interaction between competitors is more critical for the success of a firm's strategic direction when rivals have a disposition towards aggressive behavior to one another (Boeker 1991; Smith et al. 1991).

We thus argue that in more competitive contexts, firms are likely to exhibit strategic orientation differentiation. Consistent with H1, we would first expect a firm to want to choose greater emphasis on the strategic orientation that is most relevant for the dominant environmental condition (e.g., a customer orientation in growing markets), but in more competitive contexts, firms will likely exhibit a desire to be dissimilar: such that if one firm increases the emphasis it places on the orientation that matches the dominant environmental condition, the other firm will decrease its emphasis on that orientation and vice versa. The underlying rationale is that as the tendency of firms to compete aggressively increases, if all the firms follow the same

strategic orientation emphasis, the relative advantage for a firm stemming from greater emphasis on such orientation is likely to exhibit pronounced diminishing returns—prompting firms to diverge rather than converge in their strategic orientations. This could first be the result of inability to provide a unique value proposition to customers because of targeting identical customer segments with similar products and marketing approaches (Gatignon and Xuereb 1997; Slater and Narver 1994). Further, even if rival firms implement the same orientations differently at the tactical level (e.g., through pricing), a highly competitive marketplace will make it more difficult and costly to find novel and distinct tactics that create customer value and establish differentiation (e.g., Han et al. 1998). A second reason for why pursuing a similar strategic orientation emphasis may not be beneficial is that it could confuse customers by making it harder for them to make sense of the different companies, their image and brand meaning (Hannan and Freeman 1989). Finally, similar orientation emphases may further intensify competition for resources (e.g., human and financial) and channels (e.g., suppliers and distributors), and hence a firm's ability to sustain a profitable position may be hindered (Day 1994). Based on the above, we suggest our second set of hypotheses:

**H2** *The greater the competitive intensity, the greater the strategic orientation differentiation firms are likely to exhibit: (a) placing greater (smaller) emphasis on customer orientation in growing markets when their main rival places smaller (greater) emphasis on this orientation, (b) placing greater (smaller) emphasis on technology orientation in technology turbulent markets when their main rival places smaller (greater) emphasis on this orientation and (c) placing greater (smaller) emphasis on production orientation in slow growth markets when their main rival places smaller (greater) emphasis on this orientation.*

### 1.3 Performance implications of strategic orientation differentiation

An open question is whether strategic orientation differentiation pays off and under which competitive intensity conditions. Our key argument in support of H2 is that in more highly competitive contexts, if all firms follow the same strategic orientation emphasis, the relative advantage stemming from such emphasis declines considerably. This suggests that as the context becomes more competitive, strategic orientation differentiation may yield more positive outcomes for the focal firm. It is worth noting that strategic differentiation is beneficial not just for the focal firm—all firms are better off with differentiation in more competitive settings.

We also expect that adopting the industry standard strategic orientation in less competitive contexts is likely to be worthwhile. The logic is that when competition is less critical, the dominant environmental conditions are likely to be key in shaping the firm's ability to yield superior performance (Kirca et al. 2005; Slater and Narver 1994). This is likely to lead firms to focus on, and benefit from, lower strategic orientation differentiation. Formally stated:

**H3** *The greater (lower) the competitive intensity, the stronger (weaker) the effect of strategic orientation differentiation on business performance.*

## 2 Methods

### 2.1 Sampling and data collection

The empirical research involved two studies where the second aims to validate our results and address the first study's potential limitations. Study 1 was conducted in 2007. Data were collected from managers participating in an executive education program at a leading US business school, a widespread approach in marketing (e.g., Boulding et al. 1997; Schmidt and Calantone 2002). The cross-industry sampling frame included 308 firms, and the study generated 155 valid responses (50.3 % response rate). To test for nonresponse bias, we compared early and late respondent groups on relevant characteristics (e.g., firm size, age and performance) and found no significant differences (Armstrong and Overton 1977). We asked a single manager in each company to focus on a specific strategic business unit (SBU) with which they were highly familiar. Subjects included CEOs/presidents (13.5 %), VPs (30.3 %) and midlevel managers (56.2 %).

Consistent with the bulk of research in the strategic orientation area, our sample was cross-sectional, relied on single respondents and enabled collecting only subjective data. To deal with these issues, we collected additional data based on a second independent sample (Study 2). With the additional data, we validated our use of single respondents, strategic orientation measures and subjective business performance measures. Study 2 was conducted in 2009. Similar to Study 1, data were collected from managers participating in an executive education program at the same leading US business school. The cross-industry sampling frame included 218 firms, and the study generated 111 valid responses (51 % response rate). We followed the same procedure as in Study 1. An effort was made to reach multiple respondents within the same company, asking targeted managers to refer our survey to a second appropriate executive also familiar with the specific SBU. We were successful in 40 of the cases. Targeted respondents filled the complete survey and the respondents referred by them were asked only to assess the environmental conditions, performance consequences and the covariates. Subjects in the second sample included CEOs/presidents (18.9 %), VPs (31.1 %) and midlevel managers (50 %).

### 2.2 Measures

Established measures were used. Unless reported otherwise, all were measured on five-point scales.

#### 2.2.1 Strategic orientations

We used constant sum scales to measure firms' strategic orientations (e.g., Deshpandé et al. 1993; Verhoef and Leeflang 2009). The key advantage of this measurement approach is its ability to enforce interdependencies between the strategic orientations—a reality managers often face when making resource allocation decisions. Specifically, we asked respondents to allocate 100 points among alternative company descriptions, each representing a specific strategic orientation: customer, technology and production. Beyond these three key orientations, we also account for a fourth



orientation that is often discussed in marketing: selling orientation. Accounting for this orientation is valuable both conceptually and empirically. Conceptually, while the literature highlights the role of customer, technology and production orientations, in reality, firms may adopt other orientations that have perhaps received little research attention. Our specific choice of selling orientation follows the view that in spite being secondary, this orientation is still important for firms in several industries (Kotler 2003; Noble et al. 2002). Empirically, due to the interdependencies between the main strategic orientations and the use of a constant sum scale, it is not possible to analyze all orientations simultaneously. The addition of the fourth alternative, which could be removed during the empirical analysis, makes it possible to simultaneously study the three orientations of interest (Steenkamp 2001). We developed the company descriptions based on previous research (e.g., Deshpandé and Farley 1998; Kohli et al. 1993) and textbooks (e.g., Kotler 2003) and pretested them.<sup>1</sup> To minimize any presentation effects, the order of the four company descriptions was randomized across subjects during the survey. The above procedure yielded the strategic orientation profile of the SBU (e.g., 50 % customer orientation, 20 % technology orientation, 20 % production orientation and 10 % selling orientation).

The survey's respondents were also asked to identify their main business unit's rival and allocate 100 points among the four company descriptions to represent the rival's strategic orientation profile. We know from the marketing and strategy literatures that firms closely monitor their rivals, and it is often assumed that competitors know each other fairly well (e.g., Bloodgood and Bauerschmidt 2002). Further, we took a conservative approach and asked respondents to focus only on their key rival. It is argued that managers typically consider and are highly familiar with a very limited number of competitors and that they often monitor, analyze and plan against a single competing firm (Clark and Montgomery 1999; Steenkamp et al. 2005). To validate our measurement approach, we added to Study 2—our validation survey—the established multiple-item strategic orientation scales: customer orientation (Narver and Slater 1990; six items), technology orientation (Gatignon and Xuereb 1997; four items), production orientation (developed from Fritz (1996) and Kotler (2003); four items) and selling orientation (developed from Noble et al. (2002); four items). As we later report, the two measurement approaches were highly correlated and yielded similar results.

### 2.2.2 Strategic orientation differentiation

For this measure, we calculated the aggregated sum of absolute differences between a firm's strategic orientation and its rival's across the three orientations of interest.<sup>2</sup> A higher value for this measure indicates a greater degree of strategic differentiation.

<sup>1</sup> For example, the company description for production orientation was as follows: company A is involved in improving manufacturing and distribution efficiency. The primary emphasis in this company is on productivity enhancement, standardization, cost minimization and mass marketing. The company's products are of reasonable quality, they are widely available and relatively inexpensive.

<sup>2</sup> For example, if the focal company, company Z, possesses the following strategic orientation profile: 45 % customer orientation, 25 % technology orientation and 20 % production orientation (while accounting for 10 % selling orientation), and its main rival, company Y, possesses the profile: 55 % customer orientation, 30 % technology orientation and 15 % production orientation (while accounting for 0 % selling orientation), then the aggregate measure of strategic orientation differentiation for company Z is:  $(|45 - 55| + |25 - 30| + |20 - 15|) = 20$ .

### 2.2.3 *Competitive intensity*

We utilized Jaworski and Kohli's (1993) competitive intensity scale. It assesses the state of competition and competitive behaviors in an industry and included six items.

### 2.2.4 *Technology turbulence*

Technology turbulence refers to the degree to which the technology in an industry is in a state of flux. Here, too, we used Jaworski and Kohli's (1993) five items measure.

### 2.2.5 *Market growth*

This construct captures the growth in market demand. We used Hultink and Langerak's (2002) measure. It included four items. To capture the effect of 'slow growth markets,' we reversed the effect of the market growth measure.

### 2.2.6 *Business performance*

In Study 1, we used a perceptual self-assessment measure: the SBU's performance relative to its major competitors. We adopted the PIMS measure, which consists of four items (e.g., Deshpandé et al. 1993). Still, to validate the use of this subjective approach, we included in Study 2 a number of objective measures that relate to the SBU's last 3 years of performance: growth in profitability, sales and market share.

### 2.2.7 *Control variables*

We collected data on a number of variables that might affect firms' strategic behavior and performance as well as the validity of responses: SBU size and age, market concentration rates (Narver and Slater 1990), market position (specifically, degree of being a market leader; Schatzel and Calantone 2006), competitor orientation (Narver and Slater 1990), industry classification (high technology (coded as '1') vs. low technology (coded as '0') affiliation; Song et al. 2005) and respondents' management level (top management team (coded as '1') or not (coded as '0')).

We followed the standard procedures for purifying and validating our scales (Gerbing and Anderson 1988). We dropped one item relating to business performance, competitive intensity and technology turbulence. All measures showed acceptable reliabilities ( $\alpha_s$  between 0.58 and 0.90) and the confirmatory factor analysis (CFA) measurement model using a structural equation modeling (SEM) software package—AMOS 17.0—showed a satisfactory model ( $\chi_{(329)}^2=505.952$ ,  $p=0.000$ ; CFI=0.898; TLI=0.874; RMSEA=0.059). In addition, several steps were taken to ensure that common method bias is not a problem (Podsakoff et al. 2003; Rindfleisch et al. 2008).

### 3 Analysis and results

#### 3.1 Study 1

A SEM-based approach is highly appropriate for analyzing multiple dependent variables (i.e., simultaneous adoption of the three strategic orientations). Before using AMOS, we transformed the strategic orientation data. As these scores are essentially proportions, exhibiting error variances that are not normally distributed, the data were subjected to an arcsine transformation. This, then, allows for the use of standard analytical procedures (Cohen and Cohen 1975). Finally, due to the above-mentioned interdependence, we studied the three orientations of interest while removing the fourth from the analysis (i.e., selling orientation) and also allowed for correlation in their error terms (Ross et al. 1997; Steenkamp 2001).

The results lend support for H1a, H1b and H1c.<sup>3</sup> As hypothesized, we find that when greater market growth is combined with less competitive intensity, firms enhance their emphasis on customer orientation ( $\beta = -0.668$ ,  $p = 0.006$ ). In addition, we find that when greater technology turbulence is combined with less competitive intensity, firms enhance their emphasis on technology orientation ( $\beta = -0.471$ ,  $p = 0.019$ ). Also, when slower market growth (the reverse coded measure of market growth) is combined with less competitive intensity, firms enhance their emphasis on production orientation ( $\beta = 0.483$ ,  $p = 0.044$ ).

The results reported in Table 1 lend support for H2a, H2b and H2c regarding the interdependence of strategic orientations across firms as competition intensifies. Specifically, we find that in growing and more competitive environments, when the rival possesses a strong customer orientation focus, the focal firm tends to put less emphasis on customer orientation ( $\beta = -0.410$ ,  $p < 0.001$ ). We also find that in more technology turbulent and competitive environments, when the rival possesses a strong technology orientation focus, the focal firm tends to put less emphasis on technology orientation ( $\beta = -0.436$ ,  $p < 0.001$ ). Finally, we find that in slow growth markets that are more competitive, when the rival possesses a strong production orientation focus, the focal firm tends to put less emphasis on production orientation ( $\beta = 0.561$ ,  $p < 0.001$ ).

Our results regarding H3 appear in Table 2. Accordingly, the interaction of competitive intensity with strategic orientation differentiation across the three strategic orientations of interest is significant ( $\beta = 0.614$ ,  $p = 0.071$ ), suggesting that the more the environment becomes competitive, the more strategic orientation differentiation contributes to business performance.

#### 3.2 Study 2: robustness and validation

Prior to analyzing the data collected from Study 2, we made sure that all the measures follow the established purification and validation processes. The reliabilities were all

<sup>3</sup> Full results are available upon request. Note that the negative signs for the coefficients of our interaction effects are the result of the impact of lower competitive intensity; a positive sign appears only for the impact of slow market growth and is the result of the joint effect of slower market growth (–) and lower competitive intensity (–).

**Table 1** Results for testing H2—effects of dominant environmental conditions, rival's strategic orientation and competitive intensity on the focal firm's strategic orientation

| Independent variables  | Study 1 <sup>a</sup>                  |   |   | Study 2 <sup>a</sup>                  |   |   |
|--|---------------------------------------|---|---|---------------------------------------|---|---|
|  | The focal firm's customer orientation | The focal firm's technology orientation | The focal firm's production orientation | The focal firm's customer orientation | The focal firm's technology orientation | The focal firm's production orientation |
| Business unit size   | -0.045 (-1.129)                       | 0.024 (0.490)                           | 0.044 (1.622)                           | -0.111 (-1.126)                       | 0.162* (1.946)                          | 0.184** (2.247)                         |
| Business unit age  | -0.111** (-2.747)                     | 0.100** (2.007)                         | -0.005 (-0.186)                         | 0.023 (0.239)                         | -0.133 (-1.599)                         | -0.104 (-1.243)                         |
| Market concentration   | -0.052 (-1.262)                       | 0.074 (1.428)                           | 0.037 (1.320)                           | -0.059 (-0.665)                       | 0.097 (1.239)                           | 0.045 (0.586)                           |
| Market leadership  | -0.003 (-0.065)                       | 0.124 (2.368)                           | -0.080** (-2.832)                       | 0.052 (0.438)                         | 0.328** (3.246)                         | 0.006 (0.057)                           |
| Competitor orientation   | -0.032 (-0.818)                       | 0.039 (0.776)                           | -0.006 (-0.240)                         | 0.304** (2.294)                       | 0.318*** (3.695)                        | 0.039 (0.446)                           |
| Industry (high vs. low technology)                                   | -0.026 (-0.645)                       | 0.058 (1.168)                           | 0.005 (0.197)                           | -0.164** (-2.069)                     | 0.035 (0.619)                           | -0.146** (-2.138)                       |
| Respondent management position                                       | -0.007 (-0.168)                       | -0.042 (-0.839)                         | 0.003 (0.102)                           | -0.008 (-0.082)                       | 0.113 (1.369)                           | 0.055 (0.698)                           |
| Competitive intensity  | 0.121** (3.049)                       | -0.042 (-0.840)                         | 0.094*** (3.503)                        | 0.349 (1.393)                         | 0.053 (0.653)                           | -0.064 (-0.231)                         |
| Rival's customer orientation   | 0.421*** (11.712)                     | -                                       | -                                       | 0.414 (1.337)                         | -                                       | -                                       |
| Rival's technology orientation                                       | -                                     | 0.518*** (11.520)                       | -                                       | -                                     | 0.065 (0.268)                           | -                                       |
| Rival's production orientation                                       | -                                     | -                                       | 0.518*** (11.520)                       | -                                     | -                                       | 0.007 (0.036)                           |
| Market growth  | -0.147*** (3.692)                     | -0.005 (-0.100)                         | 0.207*** (7.708)                        | 0.221 (1.221)                         | -0.038 (-0.425)                         | -0.027 (-0.234)                         |
| Market growth × competitive intensity                                | 0.033 (0.841)                         | -                                       | -0.217*** (-8.443)                      | -0.141 (-0.589)                       | -                                       | 0.234 (1.035)                           |
| Rival's customer orientation × market growth                         | 0.589*** (16.394)                     | -                                       | -                                       | -0.407 (-1.216)                       | -                                       | -                                       |
| Rival's customer orientation × competitive intensity                 | -0.144*** (-3.998)                    | -                                       | -                                       | -0.176 (-1.302)                       | -                                       | -                                       |
| Rival's customer orientation × competitive intensity × market growth | <b>-0.410*** (-11.421)</b>            | -                                       | -                                       | <b>-0.168** (-2.033)</b>              | -                                       | -                                       |
| Rival's production orientation × market growth                       | -                                     | -                                       | -0.541*** (-22.671)                     | -                                     | -                                       | 0.234 (1.163)                           |
| Rival's production orientation × competitive intensity               | -                                     | -                                       | -0.104*** (-4.359)                      | -                                     | -                                       | 0.498*** (4.120)                        |

**Table 1** (continued)

| Independent variables  | Study 1 <sup>a</sup>                  |   | Study 2 <sup>a</sup>                    |                                       |   |   |
|--|---------------------------------------|---|---|---------------------------------------|---|---|
|  | The focal firm's customer orientation | The focal firm's technology orientation | The focal firm's production orientation | The focal firm's customer orientation | The focal firm's technology orientation | The focal firm's production orientation |
| Rival's production orientation × competitive intensity × market growth         | –                                     | –                                       | <b>0.561<sup>***</sup></b> (23.519)     | –                                     | –                                       | <b>–0.281<sup>***</sup></b> (–4.023)    |
| Technology turbulence  | –0.001 (–0.004)                       | 0.114 <sup>**</sup> (2.285)             | –0.078 <sup>**</sup> (–2.902)           | 0.731 <sup>*</sup> (1.886)            | –0.392 <sup>**</sup> (–1.796)           | 0.103 (1.197)                           |
| Technology turbulence × competitive intensity                                  | –                                     | 0.170 <sup>***</sup> (3.775)            | –                                       | –                                     | –0.020 (–0.090)                         | –                                       |
| Rival's technology orientation × technology turbulence                         | –                                     | 0.287 <sup>***</sup> (6.376)            | –                                       | –                                     | 0.930 <sup>***</sup> (3.295)            | –                                       |
| Rival's technology orientation × competitive intensity                         | –                                     | –0.082 <sup>*</sup> (–1.828)            | –                                       | –                                     | 0.016 (0.068)                           | –                                       |
| Rival's technology orientation × competitive intensity × technology turbulence | –                                     | <b>–0.436<sup>***</sup></b> (–9.686)    | –                                       | –                                     | <b>–0.489<sup>**</sup></b> (–2.359)     | –                                       |
| Model fit indices: $\chi^2$ (133)  |                                       | 188.44                                  |   | $\chi^2$ (159)                        | 205.156                                 | 228.803                                 |
| <i>p</i> value   |                                       | 0.001                                   |   | <i>p</i> value                        | 0.008                                   | 0.000                                   |
| CFI  |                                       | 0.986                                   |   | CFI                                   | 0.972                                   | 0.958                                   |
| TLI  |                                       | 0.952                                   |   | TLI                                   | 0.946                                   | 0.921                                   |
| RMSEA  |                                       | 0.052                                   |   | RMSEA                                 | 0.051                                   | 0.062                                   |

We report standardized coefficients (*t* values in parentheses)

\*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

<sup>a</sup> In Study 1, we ran a single model because our dependent variables are interdependent (due to the use of constant sum scales); in Study 2, we ran three separate models because we used independent scales

The hypothesized effects appear in bold

**Table 2** Results for testing H3—performance implications of strategic orientation differentiation

| Independent variables   | Dependent variable | Subjective business performance |                          | Objective business performance<br>(sales growth) |
|---|--------------------|---------------------------------|--------------------------|--|
|   |                    | Study 1                         | Study 2                  | Study 2  |
| Business unit size  |                    | 0.006 (0.071)                   | 0.104 (1.180)            | −0.105 (−1.152)                                  |
| Business unit age   |                    | 0.061 (0.668)                   | 0.078 (0.899)            | 0.017 (0.186)                                    |
| Market concentration  |                    | 0.017 (0.176)                   | 0.109 (1.298)            | −0.104 (−1.211)                                  |
| Market leadership   |                    | 0.525*** (4.027)                | 0.690*** (4.413)         | 0.135 (1.237)                                    |
| Competitor orientation  |                    | −0.013 (−0.138)                 | −0.059 (−0.613)          | −0.076 (−0.740)                                  |
| Industry (high vs. low technology)  |                    | −0.171* (−1.730)                | 0.027 (0.400)            | 0.057 (0.656)                                    |
| Respondent management position  |                    | 0.009 (0.096)                   | 0.058 (0.683)            | −0.061 (−0.683)                                  |
| Technology turbulence   |                    | 0.137 (1.235)                   | −0.050 (−0.562)          | −0.163* (−1.693)                                 |
| Market growth   |                    | 0.244** (2.239)                 | 0.003 (0.029)            | 0.396*** (4.026)                                 |
| Competitive intensity   |                    | −0.422** (−2.748)               | −0.284** (−2.549)        | −0.209** (−2.031)                                |
| Strategic orientation differentiation:<br>customer, technology and<br>production orientations                             |                    | −0.559* (−1.797)                | 0.025 (0.314)            | 0.187*** (2.201)                                 |
| Competitive intensity × strategic<br>orientation differentiation<br>(customer, technology and<br>production orientations) |                    | <b>0.614* (1.806)</b>           | <b>0.167** (2.108)</b>   | <b>0.207** (2.628)</b>                           |
| Model fit indices: $\chi^2_{(df)}$  |                    | $\chi^2_{(236)}=392.672$        | $\chi^2_{(240)}=310.841$ | $\chi^2_{(244)}=369.314$                         |
| p value   |                    | 0.000                           | 0.001                    | 0.000  |
| CFI   |                    | 0.908                           | 0.951                    | 0.906  |
| TLI   |                    | 0.873                           | 0.923                    | 0.865  |
| RMSEA   |                    | 0.066                           | 0.052                    | 0.068  |

We report standardized coefficients (*t* values in parentheses)

\*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

The hypothesized effects appear in bold

acceptable ( $\alpha_s$  between 0.79 and 0.91) and the CFA measurement model satisfactory ( $\chi^2_{(734)}=1,055.25$ ,  $p < 0.05$ ; CFI=0.850; TLI=0.824; RMSEA=0.063). Here, we dropped one item from the business performance, market leadership and market growth measures.

Study 2 was helpful in validating our use of single respondents. We compared all study constructs used in Study 1 to the same set of constructs used in Study 2 and then conducted the same comparison with data from Study 2 that included multiple respondents. In both cases, a series of independent samples *t* tests showed nonsignificant differences across all variables. Second, Study 2 validated our use of subjective performance measures in Study 1. We first replicated the effect of strategic orientation differentiation on subjective business performance ( $\beta=0.167$ ,  $p=0.035$ , as per Table 2). We, then, found very high correlation with the objective performance measure of growth in sales ( $r=0.589$ ,  $p < 0.001$ ) yet weaker links with growth in profitability ( $r=0.244$ ,  $p=0.01$ ) and market share ( $r=0.149$ ,  $p=0.119$ ). We, thus, also

tested H3 with objective data on sales growth and replicated the effect of strategic orientation differentiation ( $\beta=0.207$ ,  $p=0.009$ , as per Table 2). Third, Study 2 validated our strategic orientation measures by performing the analysis not with the original constant sum measures but with the orientations' scales (Study 2 columns in Tables 1 and 2).<sup>4</sup> Overall, while the second sample is smaller in size, we were able to replicate the majority of the findings. The exception refers to the effects on production orientation: in Study 2, firms tended to systematically follow production orientation. This may be explained by the fact that Study 2 was conducted during the 2009 global economic crisis, which resulted in a very slow market growth (even market contraction in some industries) and a cost cutting mentality across firms.

#### 4 Summary and conclusions

Our results have both theoretical and managerial implications. First, our purpose in this paper was to add an unstudied and important dimension to research on strategic orientation choices and their impact on business performance. Specifically, we advanced the possibility that competitive intensity, which creates a desire to differentiate, could complement the sole reliance of firms on dominant environmental conditions in making their strategic orientation decisions. We showed that in less competitive contexts, firms tend to pursue a low degree of strategic orientation differentiation and emphasize the orientation that is consistent with the dominant environmental condition. This finding supports earlier research on the contingency approach to strategic orientations (e.g., Gao et al. 2007; Gatignon and Xuereb 1997). However, in more competitive contexts, a firm's strategic orientation emphasis may diverge from that of its key rivals. Further, we demonstrate that strategic orientation differentiation enhances business performance when competition intensifies, suggesting that this is a viable strategic behavior. The latter set of results, which has not been accounted for by prior research, may help reconcile some of the disparate findings in the strategic orientation literature.

For managers, this study is important in that it serves up a highly nuanced model of strategic differentiation: that firms need to look carefully at what strategic orientation their rivals are pursuing so that they can distinguish themselves appropriately. This is not in itself a blind rule of "be different from your key rival" but rather it depends precisely on the setting in which the firm operates. In a relatively noncompetitive context, like public utilities for example, a firm needs to choose a strategic orientation that is primarily determined by the environment, for example, a technology orientation when technology turbulence is high. However, in a highly competitive context, such as banking, firms are better off (at least on the margin) diverging from the strategic orientation their main rival is pursuing in conjunction with considering the dominant environmental condition.

<sup>4</sup> As per Table 1, because we are using strategic orientation scales rather than constant sum measures, we run separate models for each dependent variable (i.e., each strategic orientation).

## 5 Limitations and future research directions

Our study suffers from several limitations that could provide future research opportunities. For instance, given that firms prefer to diverge from the strategic orientation emphasized by their rival, the question arises as to which alternative orientation should be adopted. Additionally, it is not clear in what manner and at what frequency firms reevaluate their orientations vis-à-vis their rivals.

Some of the discussed dynamics may be more useful to study in a longitudinal rather than a cross-sectional design. Still, strategic orientations, which are not something firms change easily or often, may be appropriately studied in a cross-sectional design. As long as we study industries that have existed for a while, we can assume that strategic orientations are roughly stable, as if in some kind of equilibrium.

Finally, our study is based on subjective perceptions of managers in the focal firm. Even though extensive efforts were made to validate our measures through additional independent and objective data, future research can add to our empirical work in two ways. First, it can study actual reactions of firms to their rivals. Second, it can add the competitors' point of view, making it possible to identify discrepancies between the focal firm's perceptions and those of its rival, and study the consequences of these discrepancies if they exist.

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